AirCell's Criticisms of Space Data's ATG Proposals are Inaccurate and Completely Unsubstantiated

Assertion	Response
Cell phones do not operate in ATG band	Personal handsets can be easily modified to operate on ATG frequencies. Manufacturers currently make special handsets with more extensive modifications than those required to support the ATG operations for much smaller markets (e.g., "World Phones" that operate domestically and abroad). Expanding phones to work in ATG band is simpler since ATG is adjacent to the cellular band whereas international bands used in "World Phones" are not.
High power user devices would be impossible to certify with FAA	RTCA, Inc. recently issued guidelines that would allow WiFi and mobile phones to operate on aircraft.[1] Some airlines have already approved WiFi (0.8 W).[2] Qualcomm also has tested 50-100 mobile phones at maximum power (0.6 W) on commercial aircraft with no anomalies observed in avionics.[3]
The transmit power of an expanded band phone is insufficient to link with a balloon	Expanded band cell phones have adequate power to communicate with Space Data's stratospheric network. Space Data's Sept. 9, 2004 ex parte shows an acceptable link budget margin from handsets using the average power of a standard mobile phone (0.2 W or 23 dBm for CDMA and 0.5 W or 27 dBm for iDEN).

(1) "Guidance on Allowing T-PEDs on Aircraft," DO-294, Oct. 19, 2004, avail. at www.rtca.org.
(2) *See* Verizon's ex parte comments, Oct. 21, 2004, and RTCA DO-294, page 3.D-12.
(3) *See* slide 7 of attachment to Qualcomm's ex parte comments, Sept. 30, 2004.

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Assertion	Response
With reuse, insufficient spectrum is available to meet ATG demand	A 1.5 MHz license with iDEN and reuse of 7 provides the capacity required by the projected ATG market of 40,000 simultaneous users (see Space Data's Sept. 9, 2004 ex parte, Tables 1 and 2). A 1.0 MHz license with iDEN and a reuse of 7 provides sufficient capacity for valuable voice and SMS service and would allow vigorous competition with a second ATG operator.
Maintaining a fleet of balloons is costly or impossible	Space Data's balloon platforms are in commercial operation providing low-cost NPCS service to more than 2.1 million square kilometers in the west and southwest portions of the United States. Stratospheric winds are fairly uniform; any seasonal variations are predictable and well established. Thus, a balloon-borne network easily can be properly spaced. Similar platforms can be used with different transmission equipment tuned to the ATG band.

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